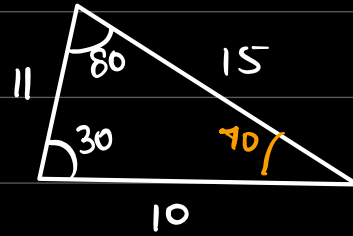
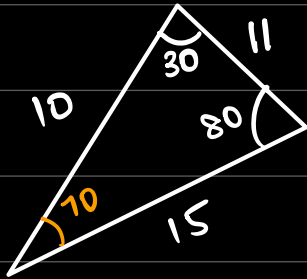
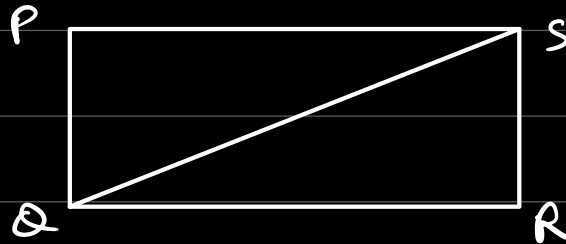


CONGRUENT

EXACT SAME



1 SSS



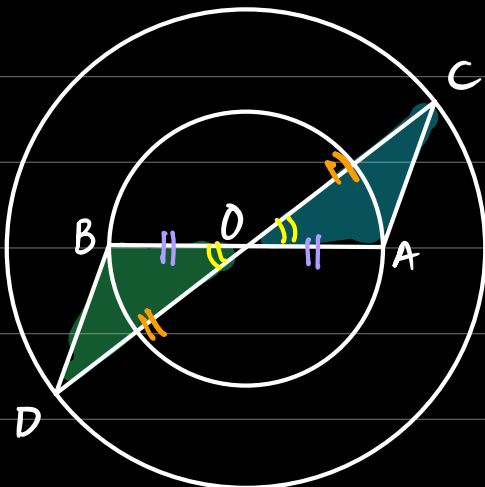
③ $PQ = SR$ (opp sides of rectangle)

④ $PS = QR$ (opp sides of rectangle)

⑤ QS is a common length

Hence by SSS property, $\triangle QPS$ is congruent to $\triangle SRQ$

2 SAS → Angle must be between the two
sides must be neighbours of angle
proven sides.



$OB = OA$ (radius of smaller circle)

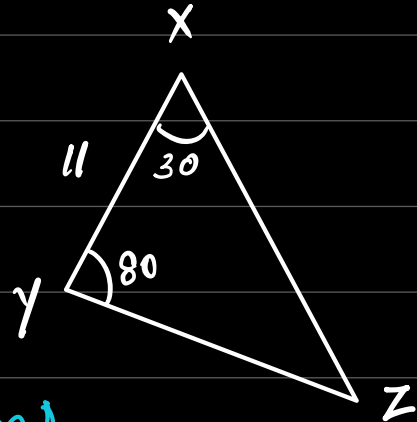
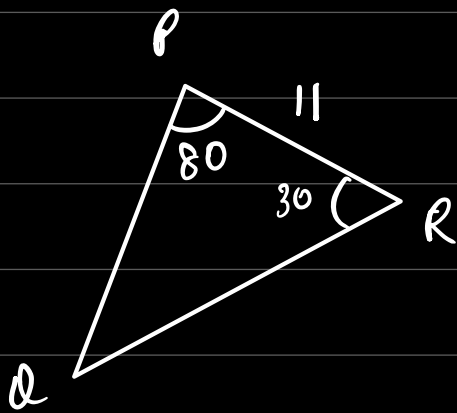
$OC = OD$ (radius of bigger circle)

$\angle BOD = \angle AOC$ (vertically opp. angles)

Hence by SAS property,

$\triangle AOC$ is congruent to $\triangle BOD$.

3 **AAS** → Side proven should be a corresponding side.



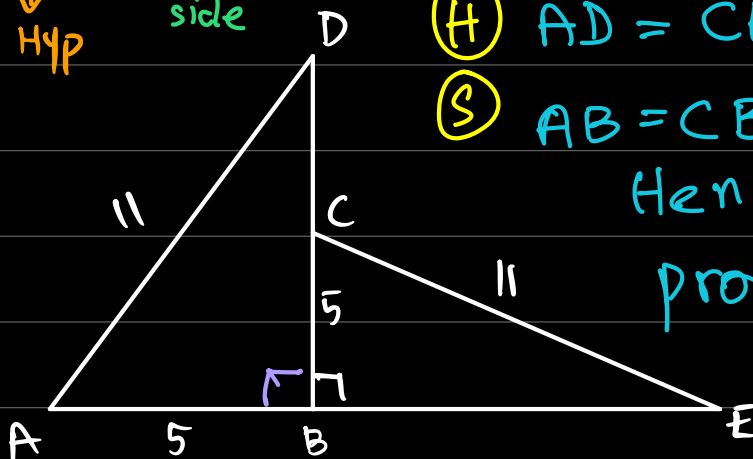
③ $PR = XY = 11$ (given)

① $\angle P = \angle X = 80$ (given)

② $\angle R = \angle Z = 30$ (given)

Hence by AAS property.

4 **RHS**
 Right angle
 Hyp
 side



① $\angle ABD = \angle CBE = 90$ (given)

② $AD = CE = 11$ (given)

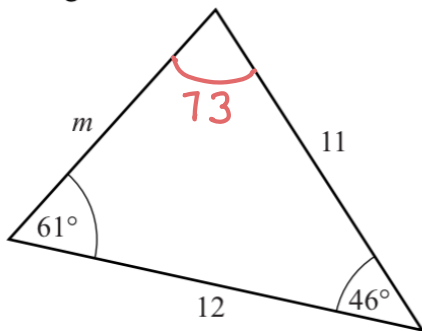
③ $AB = CB = 5$ (given)

Hence by RHS

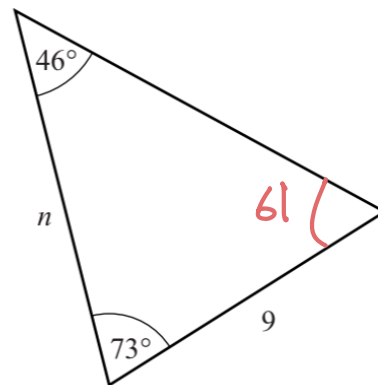
property, $\triangle ABD$ and $\triangle CBE$ are congruent.

AAA → Similarity.

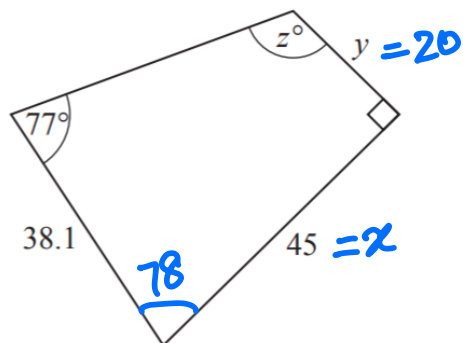
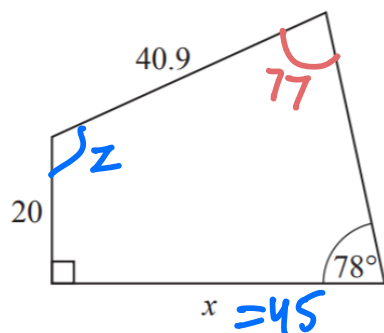
- 5 These two triangles are congruent.
The lengths are in centimetres.



Find m and n .



Answer $m = 9$
 $n = 11$ [2]



These two quadrilaterals are congruent. The lengths are in millimetres.

Find the values of x , y and z .

$$90 + 77 + 78 + z = 360$$

$$z = 115$$

Answer $x = \dots\dots\dots$

$y = \dots\dots\dots$

$z = \dots\dots\dots$ [3]